

IN THE CLAIMS

Please amend the claims to read as indicated herein.

Please cancel claims 4, 5, 7 and 10

1. (currently amended) A method of detecting a ~~selected portion~~preamble of a data packet formatted to conform to a wireless communications standard, comprising the steps of:

defining a reference cosine signal waveform ~~conforming to an expected waveform~~
~~representing a signal modulated in accordance with a selected portion of a data~~
~~packet;~~

receiving a data signal containing a ~~data packet with said selected portion~~said preamble;

deriving a waveform representing said data signal containing said preamble;

correlating said reference cosine signal waveform with said waveform representing said
data signal containing said preamble to produce a correlation result; ~~and~~

identifying said ~~selected portion~~preamble in said data signal in accordance with said
correlation result; and

comparing a part of the data packet other than said preamble with a predetermined
criterion, and confirming identification of said preamble in accordance with the result
of such comparison.

2. (original) The method of claim 1, wherein said waveform representing said data signal is derived to represent a characteristic of modulation of said data signal in accordance with data in said data packet.

3. (original) The method of claim 2, wherein said data signal is a frequency-shift keyed signal and said waveform representing said data signal is derived to represent frequency deviation of said data signal as a function of time.

4. (canceled)

5. (canceled)

6. (currently amended) The method of claim 1, wherein said ~~data packet~~ wireless communications standard is a Bluetooth ~~data packet~~ wireless communications standard.

7. (canceled)

8. (currently amended) The method of claim ~~6~~1, wherein the part of the data packet other than said preamble comprises a portion of a sync word in the data packet ~~is examined to confirm identification of said preamble~~.

9. (currently amended) The method of claim 8, wherein the part of the data packet other than said preamble comprises six most significant bits of the sync word ~~are examined to confirm identification of said preamble~~.

10. (canceled)

Please add the following claim, newly numbered as claim 11.

11. (new) An apparatus for detecting a preamble of a data packet formatted to conform to a wireless communications standard, comprising:

a waveform generator for defining a reference cosine signal waveform;
a receiver for receiving a data signal containing said preamble, and for deriving a waveform representing said data signal containing said preamble; and
a correlator for correlating said reference cosine signal waveform with said waveform representing said data signal containing said preamble to produce a correlation result, identifying said preamble in said data signal in accordance with said correlation result, comparing a part of the data packet other than said preamble with a predetermined criterion, and confirming identification of said preamble in accordance with the result of such comparison.